

MEETING SUMMARY

International Diesel Retrofit Advisory Committee:
Stationary and Portable Engine Workgroup Meeting
February 6, 2001

Meeting Summary: Peter Venturini (ARB) and Robert Hughes (ARB) led the meeting. Robert presented to the group a draft meeting agenda (enclosure 1), a document defining the mission and objectives of the workgroup (enclosure 2), and a summary of evaluation programs for catalyst-based diesel particulate filter (DPF) technologies used on stationary and portable diesel-fueled engines (enclosure 3.) The following summarizes the key discussion points.

1. Discussion of Mission Statement (see enclosure 2.)

- Role of workgroup relating to agricultural equipment needs to be clarified. Is there a technological reason to separate agricultural stationary and agricultural portable engines from non-agricultural stationary and portable engines?

2. Discussion of Workgroup Objectives (see enclosure 2.)

- Workgroup should establish clearinghouse for DPF retrofit applications.
- It is important that workgroup members share information on successful applications of DPFs.
- ARB will be evaluating data from retrofit applications in Europe for inclusion in clearinghouse.
- Workgroup discussed contacting control equipment manufacturers for existing data on exhaust temperature for engines. This information can be used to determine the applicability of specific catalyst-based DPF technologies on specific engine applications and could be included in the clearinghouse.
- Workgroup needs to clarify what will be included in DPF cost estimates (e.g., capital costs, installation costs, operating costs, and maintenance costs.)

ACTION ITEM (1): ARB will revise Mission Statement and Objectives and e-mail to attendees.

ACTION ITEM (2): ARB will contact DPF manufacturers to obtain information to be included in the retrofit application clearinghouse.

3. Discussion of DPF Retrofit Evaluation Programs (see enclosure 3.)

- ARB is coordinating the testing of back-up generator set applications with catalyst-based DPFs at two locations: Sierra Nevada Brewery in Chico, CA. and Santa Clara County Government Complex.
- Construction Industry Air Quality Coalition (CIAQC) is coordinating a catalyst-based DPF demonstration project on construction equipment.
- Members of the workgroup stressed the importance of the demonstration programs reflecting real-life conditions.
- Jeb Stuart (CIAQC) and James Thomas (Pool Well Services Co.) expressed interest in working with the ARB to develop and implement catalyst-based DPF demonstration programs for crane and oilwell drilling equipment .
- Workgroup agreed the use of temperature/pressure dataloggers as a preliminary step in determining the feasibility of catalyst-based DPF retrofits on specific applications has merit and should be included in the demonstration programs.

ACTION ITEM (3): ARB will coordinate with James Thomas on an oilwell drilling equipment demonstration project; and with Jeb Stuart on crane demonstration project.

Next Steps: Workgroup will meet at next scheduled IDRAC meeting.

ENCLOSURE 1

Agenda for IDRAC Stationary & Portable Workgroup Meeting

February 5, 2001

- I. Introductions
- II. Workgroup Mission and Objectives
- III. Existing CB-DPF Evaluation Programs
- IV. Other Known Stationary / Portable CB-DPF Installations
- V. Identify Engine Categories and/or Operating Modes That May Represent a Challenge to Successful CB-DPF Installation and Use
- VI. Recommendations for Other Demonstration Projects
- VII. Summary / Wrap-Up

ENCLOSURE 2

Mission and Objectives for the Stationary & Portable Engine Workgroup

February 5, 2001

Mission Statement - To advise ARB staff on the technical issues associated with the retrofit of diesel PM controls on stationary, portable, and agricultural diesel engines.

Workgroup Objectives

- To provide technical information regarding diesel PM controls for stationary and portable engines, including agricultural engines.
- To assist in developing specific demonstration projects for diesel-fueled stationary and portable engines that have not been successfully retrofitted.
- To encourage catalyst-based diesel particulate filter manufacturers to participate in the verification and demonstration projects.
- To assist in identifying unusual vehicle and/or engine operating modes that would present a technical challenge to catalyst-based diesel particulate filters effectiveness and durability.
- To openly share test data from all demonstration programs, as well as, all non-proprietary technical data.
- To identify costs for retrofit devices.
- To enhance communication between manufacturers of retrofit devices, engine and equipment manufacturers, and end-users regarding technical concerns and solutions.
- To perform an advisory role in providing technical information regarding diesel PM controls.

ENCLOSURE 3
Catalyst-Based Diesel Particulate Filter Evaluation Programs for Stationary and Portable Diesel-Fueled Engines
February 5, 2001

Evaluation Program	Engine Use	Engine Type	Engine Model Year	Emission Category	Comments
Sierra Nevada Brewery	Stationary Generator	4-Cycle, Constant Speed	1999	Non-Certified	Two CDPFs were installed on each of two Caterpillar 3412 engines used to power 750 kW emergency backup generators.
Santa Clara County	Stationary Generator	4-Cycle, Constant Speed	1997	Non-Certified	The County operates a 1500 kW emergency backup generator equipped with two CDPFs. The system was installed in 1997. ARB staff is coordinating with the County and the CDPF manufacturer to conduct an emission test of the system.
Power Plant Construction - Sunrise Plant	- -	- -	- -	- -	Several pieces of equipment used during the construction of the Sunrise Power Plant were retrofitted with CDPFs.
Construction Equipment - CIAQC	- -	- -	- -	- -	Evaluation program under development.
CalTrans	- -	- -	- -	- -	Evaluation program under development.
Oilwell Drilling & Servicing	- -	- -	- -	- -	Evaluation program under consideration.
Agricultural Equipment Demonstration	- -	- -	- -	- -	Evaluation program under development.
Others	- -	- -	- -	- -	